```
=> d his ful
```

        (FILE 'HOME' ENTERED AT 15:26:36 ON 19 JAN 2007)

        FILE 'REGISTRY' ENTERED AT 15:26:44 ON 19 JAN 2007
L1   STRUCTURE UPLOADED
L2   STRUCTURE UPLOADED
L3   STRUCTURE UPLOADED
L4   88 SEA SSS FUL L2
L5   101 SEA SSS FUL L3
L6   244 SEA SSS FUL L1

        FILE 'HCAPLUS, USPATFULL, USPAT2' ENTERED AT 15:29:32 ON 19 JAN 2007
L7   43 SEA ABB=ON   PLU=ON   L4
L8   33 SEA ABB=ON   PLU=ON   L5
L9   63 SEA ABB=ON   PLU=ON   L6
L10   132 SEA ABB=ON   PLU=ON   L7 OR L8 OR L9
L11   117 DUP REM L10 (15 DUPLICATES REMOVED)
                ANSWERS '1-92' FROM FILE HCAPLUS
                ANSWERS '93-117' FROM FILE USPATFULL
L12   93 SEA ABB=ON   PLU=ON   L11 AND (PD=<20030826 OR PRD=<20030826)
L13   88 SEA ABB=ON   PLU=ON   L12 AND (PD=<20020826 OR PRD=<20020826)
L14   2 SEA ABB=ON   PLU=ON   L12 AND (PD=20020826 OR PRD=20020826)
L15   86 SEA ABB=ON   PLU=ON   L13 NOT L14
                D L15 1-2 IBIB HITSTR
L16   86 DUP REM L15 (0 DUPLICATES REMOVED)
                ANSWERS '1-64' FROM FILE HCAPLUS
                ANSWERS '65-86' FROM FILE USPATFULL
              D L16 65-86 IBIB HITSTR

        FILE 'REGISTRY' ENTERED AT 15:35:19 ON 19 JAN 2007
L17   STRUCTURE UPLOADED
L18   35 SEA SUB=L4 SSS FUL L17
L19   92 SEA SUB=L5 SSS FUL L17
L20   167 SEA SUB=L6 SSS FUL L17
L21   278 SEA ABB=ON   PLU=ON   L18 OR L19 OR L20

        FILE 'HCAPLUS, USPATFULL, USPAT2' ENTERED AT 15:37:29 ON 19 JAN 2007
L22   28 SEA ABB=ON   PLU=ON   L21 AND 15
                D L22 1-28 IBIB HITSTR

        FILE 'REGISTRY' ENTERED AT 15:51:06 ON 19 JAN 2007
L23   STRUCTURE UPLOADED
                D
L24   0 SEA SSS SAM L23
L25   24 SEA SSS FUL L23

        FILE 'HCAPLUS, USPATFULL, USPAT2' ENTERED AT 15:52:08 ON 19 JAN 2007
L26   19 SEA ABB=ON   PLU=ON   L25
L27   16 SEA ABB=ON   PLU=ON   L26 AND (PD=<20030826 OR PRD=<20030826)
L28   15 SEA ABB=ON   PLU=ON   L27 AND (PD=<20020826 OR PRD=<20020826)
L29   15 SEA ABB=ON   PLU=ON   L28 AND (PD<20020826 OR PRD<20020826)
L30   12 DUP REM L29 (3 DUPLICATES REMOVED)
                ANSWERS '1-6' FROM FILE HCAPLUS
                ANSWERS '7-12' FROM FILE USPATFULL
              D L30 1-12 IBIB HITSTR

        FILE 'REGISTRY' ENTERED AT 15:56:55 ON 19 JAN 2007
L31   STRUCTURE UPLOADED

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                 D
L32          71 SEA SSS FUL L31

     FILE 'HCAPLUS, USPATFULL, USPAT2' ENTERED AT 15:57:30 ON 19 JAN 2007
L33          27 SEA ABB=ON  PLU=ON  L32 AND (PD=<20030826 OR PRD=<20030826)
L34          25 SEA ABB=ON  PLU=ON  L33 AND (PD=<20020826 OR PRD=<20020826)
L35          25 SEA ABB=ON  PLU=ON  L34 AND (PD<20020826 OR PRD<20020826)
L36          25 SEA ABB=ON  PLU=ON  L35 NOT L27
L37          23 DUP REM L36 (2 DUPLICATES REMOVED)
                  ANSWERS '1-15' FROM FILE HCAPLUS
                  ANSWERS '16-23' FROM FILE USPATFULL
              D L37 1-23 IBIB HITSTR
```

FILE HOME

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 18 JAN 2007   HIGHEST RN 917867-30-2
DICTIONARY FILE UPDATES: 18 JAN 2007   HIGHEST RN 917867-30-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

     Please note that search-term pricing does apply when
     conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE HCAPLUS
FILE COVERS 1907 - 19 Jan 2007   VOL 146 ISS 5
FILE LAST UPDATED: 18 Jan 2007   (20070118/ED)

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 18 Jan 2007 (20070118/PD)
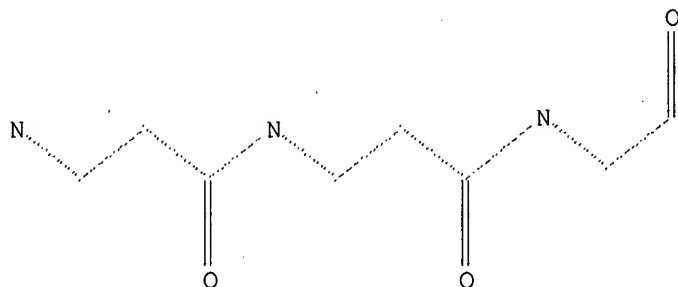FILE LAST UPDATED: 18 Jan 2007 (20070118/ED)
CA INDEXING IS CURRENT THROUGH 18 Jan 2007 (20070118/UPCA)
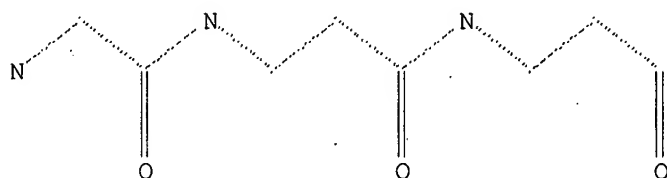ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 Jan 2007 (20070118/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006

FILE USPAT2
FILE COVERS 2001 TO PUBLICATION DATE: 18 Jan 2007 (20070118/PD)
FILE LAST UPDATED: 18 Jan 2007 (20070118/ED)
CA INDEXING IS CURRENT THROUGH 18 Jan 2007 (20070118/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 Jan 2007 (20070118/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006

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=> d que sta 122; d que sta 130; d que sta 137
L1                STR
```

Structure attributes must be viewed using STN Express query preparation.
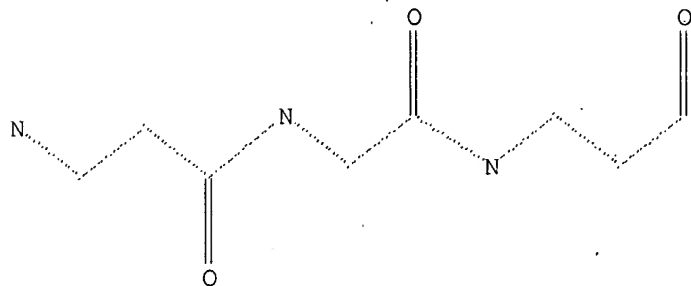L2   STR
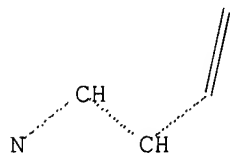

Structure attributes must be viewed using STN Express query preparation.
L3   STR

Structure attributes must be viewed using STN Express query preparation.
L4   88 SEA FILE=REGISTRY SSS FUL L2
L5   101 SEA FILE=REGISTRY SSS FUL L3
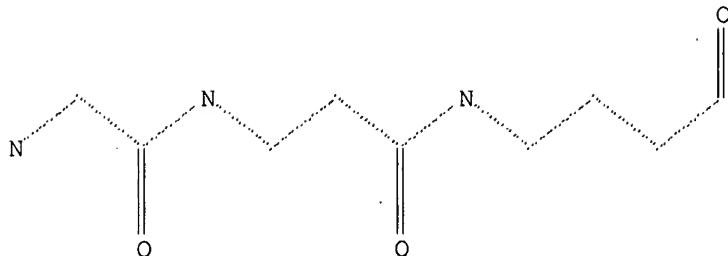L6   244 SEA FILE=REGISTRY SSS FUL L1
L17   STR

Structure attributes must be viewed using STN Express query preparation.
L18   35 SEA FILE=REGISTRY SUB=L4 SSS FUL L17
L19   92 SEA FILE=REGISTRY SUB=L5 SSS FUL L17
L20   167 SEA FILE=REGISTRY SUB=L6 SSS FUL L17
L21   278 SEA FILE=REGISTRY ABB=ON   PLU=ON   L18 OR L19 OR L20

L22   28 SEA L21 AND 15
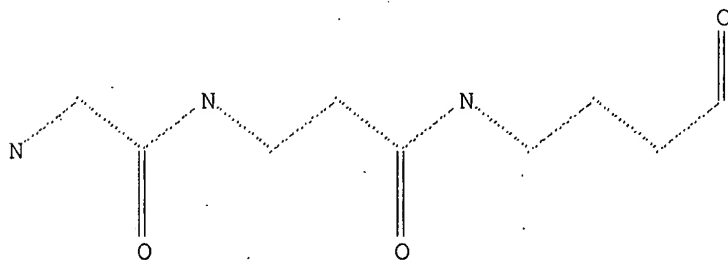

L23   STR

Structure attributes must be viewed using STN Express query preparation.
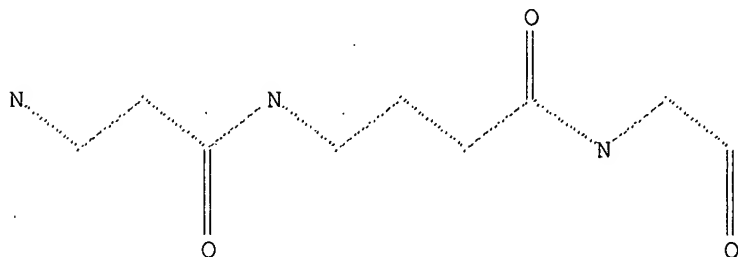L25   24 SEA FILE=REGISTRY SSS FUL L23
L26   19 SEA L25
L27   16 SEA L26 AND (PD=<20030826 OR PRD=<20030826)
L28   15 SEA L27 AND (PD=<20020826 OR PRD=<20020826)
L29   15 SEA L28 AND (PD<20020826 OR PRD<20020826)
L30   12 DUP REM L29 (3 DUPLICATES REMOVED)

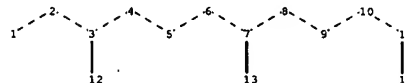L23   STR

Structure attributes must be viewed using STN Express query preparation.
L25   24 SEA FILE=REGISTRY SSS FUL L23
L26   19 SEA L25
L27   16 SEA L26 AND (PD=<20030826 OR PRD=<20030826)
L31   STR

Structure attributes must be viewed using STN Express query preparation.
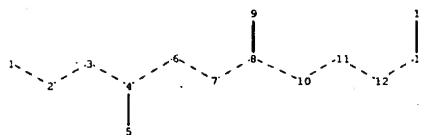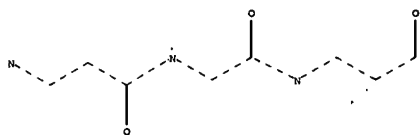L32   71 SEA FILE=REGISTRY SSS FUL L31
L33   27 SEA L32 AND (PD=<20030826 OR PRD=<20030826)
L34   25 SEA L33 AND (PD=<20020826 OR PRD=<20020826)
L35   25 SEA L34 AND (PD<20020826 OR PRD<20020826)
L36   25 SEA L35 NOT L27
L37   23 DUP REM L36 (2 DUPLICATES REMOVED)

chain nodes :
    3   7   11   12   13   14
ring nodes :
    5   6   9   10
ring/chain nodes :
    1   2   4   8
chain bonds :
    2-3   3-4   3-12   6-7   7-8   7-13   10-11   11-14
ring/chain bonds :
    1-2   4-5   8-9
ring bonds :
    5-6   9-10
exact/norm bonds :
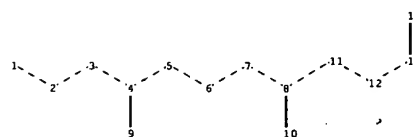   1-2   2-3   3-4   3-12   4-5   5-6   6-7   7-8   7-13   8-9   9-10   10-11   11-14

Match level :
    1:CLASS   2:CLASS   3:CLASS   4:CLASS   5:Atom   6:Atom   7:CLASS   8:CLASS
    9:Atom   10:Atom   11:CLASS   12:CLASS   13:CLASS   14:CLASS

```
chain nodes :
    4   5   8   9   13   14
ring nodes :
   `2   3   11   12
ring/chain nodes :
    1   6   7   10
chain bonds :
    3-4   4-5   4-6   7-8   8-9   8-10   12-13   13-14
ring/chain bonds :
    1-2   6-7   10-11
ring bonds :
    2-3   11-12
exact/norm bonds :
    1-2   2-3   3-4   4-5   4-6   6-7   7-8   8-9   8-10   10-11   11-12   12-13   13-14


Match level :
    1:CLASS   2:Atom   3:Atom   4:CLASS   5:CLASS   6:CLASS   7:CLASS   8:CLASS
    9:CLASS   10:CLASS   11:Atom   12:Atom   13:CLASS   14:CLASS
```

chain nodes :
    4   8   9   10   13   14
ring nodes :
    2   3   6   7
ring/chain nodes :
    1   5   11   12
chain bonds :
    3-4   4-5   4-9   7-8   8-10   8-11   12-13   13-14
ring/chain bonds :
    1-2   5-6   11-12
ring bonds :
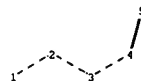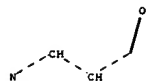   2-3   6-7
exact/norm bonds :
    1-2   2-3   3-4   4-5   4-9   5-6   6-7   7-8   8-10   8-11   11-12   12-13   13-14

Match level :
    1:CLASS   2:Atom   3:Atom   4:CLASS   5:CLASS   6:Atom   7:Atom   8:CLASS   9:CLASS
    10:CLASS   11:CLASS   12:CLASS   13:CLASS   14:CLASS
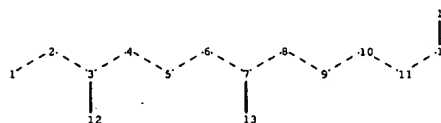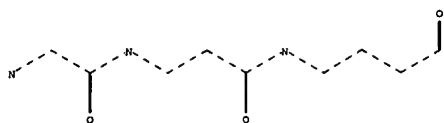
```
chain nodes :
    4   5
ring nodes :
    2   3
ring/chain nodes :
    1
chain bonds :
    3-4   4-5
ring/chain bonds :
    1-2
ring bonds :
    2-3
exact/norm bonds :
    1-2   2-3  3-4   4-5


Match level :
    1:CLASS   2:Atom   3:Atom   4:CLASS   5:CLASS
```

```
chain nodes :
    3   7   12   13   14   15
ring nodes :
    5   6   9   10
ring/chain nodes :
    1   2   4   8   11
chain bonds :
    2-3   3-4   3-12   6-7   7-8   7-13   11-14   14-15
ring/chain bonds :
    1-2   4-5   8-9   9-10   10-11
ring bonds :
    5-6
exact/norm bonds :
    1-2   2-3   3-4   3-12   4-5   5-6   6-7   7-8   7-13   8-9   9-10   10-11   11-14
    14-15


Match level :
    1:CLASS   2:CLASS   3:CLASS   4:CLASS   5:Atom   6:Atom   7:CLASS   8:CLASS
    9:Atom   10:Atom   11:CLASS   12:CLASS   13:CLASS   14:CLASS   15:CLASS
```
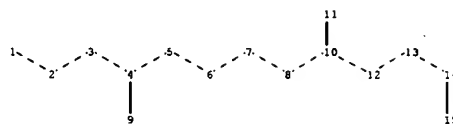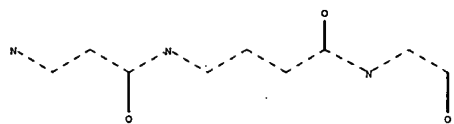
chain nodes :
    4   9   10   11   14   15
ring nodes :
    2   3   6   7
ring/chain nodes :
    1   5   8   12   13
chain bonds :
    3-4   4-5   4-9   8-10   10-11   10-12   13-14   14-15
ring/chain bonds :
    1-2   5-6   6-7   7-8   12-13
ring bonds :
    2-3
exact/norm bonds :
    1-2   2-3   3-4   4-5   4-9   5-6   6-7   7-8   8-10   10-11   10-12   12-13   13-14
    14-15

Match level :
    1:CLASS   2:Atom   3:Atom   4:CLASS   5:CLASS   6:Atom   7:Atom   8:CLASS   9:CLASS
    10:CLASS   11:CLASS   12:CLASS   13:CLASS   14:CLASS   15:CLASS

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S9	2	"6958384".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:22
S12	13192	S11 or S10	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:42
S11	12793	hayen.in. or schmitt.in. or ngassa.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:42
S10	402	gellman.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:42
S7	11817	S6 or S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:42
S6	11480	hayen.in. or schmitt.in. or ngassa.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:42
S13	39	gellman-s$-$.in. or hayen-A$.in. or schmitt-margaret-$.in. or ngassa-f$-$.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2007/01/19 14:43
S14	0	("2002/0032334").URPN.	USPAT	AND	ON	2007/01/19 14:54
S15	1	"6710186".pn.	USPAT	AND	ON	2007/01/19 16:05
S17	1	"5064804".pn.	USPAT	AND	ON	2007/01/19 16:07
S16	1	"5328900".pn.	USPAT	AND	ON	2007/01/19 16:07
S18	1	"5064814".pn.	USPAT	AND	ON	2007/01/19 18:50
S21	7	kaiser-d$-A$.in.	USPAT	AND	ON	2007/01/19 18:51
S20	1	pollard-t$-d.in.	USPAT	AND	ON	2007/01/19 18:51
S19	6	ichikawa-Yoshitaka.in.	USPAT	AND	ON	2007/01/19 18:51
S22	470	ichikawa-Y$.in.	USPAT	AND	ON	2007/01/19 18:52

S23	17	S22 and oligomer	USPAT	AND	ON	2007/01/19 19:00
S25	1	"7067525".pn.	USPAT	AND	ON	2007/01/19 19:03
S24	1	"6060585".pn.	USPAT	AND	ON	2007/01/19 19:03